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| 10/726,760 | 12/03/2003 | Thomas Koerner | DKT02164 | 4211 |

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| EXAMINER | |
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| TRIEU, THAI BA | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3748 | |

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/726,760 | KOERNER, THOMAS | |
| | Examiner | Art Unit | |
| | Thai-Ba Trieu | 3748 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *26 August 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *19 and 20* is/are allowed.

6)☒ Claim(s) *1-3,6-10 and 13-18* is/are rejected.

7)☒ Claim(s) *4,5,11 and 12* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 26, 2005 has been entered.

Applicant's cooperation in amending the claims to overcome the claim objections relating to informalities as well as indefinite claim language is also appreciated. Claims 1, 5-6, and 8 were amended; and claims 19-20 were newly added.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

***Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakazawa (Patent Number JP 54-129221 A).***

Nakazawa discloses a turbocharger and exhaust manifold system comprising:

a turbine housing (8) defining a rotor space for receiving and accommodating a turbine rotor (1), and

a branch pipe (7) connecting said turbine housing (8) to at least one piece (12) of an exhaust gas manifold of a combustion motor (Not shown);

wherein the turbine housing and at least the branch pipe (7) for the connection with the exhaust gas manifold piece (via 12) are made of sheet metal, and

wherein the exhaust gas manifold pieces (via 12) are thermal connection with said turbine housing (8) (See Figures 1-2 and Abstract); and

wherein said branch pipe (7) is part of an exhaust manifold piece (via 12) which exhaust manifold piece (via 12) is a component of the exhaust gas manifold.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

***Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa (Patent Number JP 54-129221 A), in view of Stratton et al. (Patent Number 4,192,122).***

Nakazawa discloses the invention as recited above; however, Nakazawa fails to disclose at least partially realized by a sliding connection.

Stratton teaches that it is conventional in the insulated exhaust manifold art, to utilize at least partially realized by a sliding connection (See Figures 1-3, Column 2, lines 56-68, and Column 3, lines 1-6).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized at least partially realized by a sliding connection, as taught by Stratton, to improve the protective structures, in the Nakazawa device.

***Claims 6, 8 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa (Patent Number JP 54-129221 A), in view of the admitted prior art of Manfred et al. (Patent Number DE 100 22 052 A1).***

Nakazawa discloses the invention as recited above; however, Nakazawa fails to disclose the thickness of the inner and outer layers; the inner of the sheet metal layers being attached to the branch pipe by a sliding connection, whereas the respective outermost sheet metal layer is formed of a first spiral housing part and a second half part; and two mutually complementary spiral portions being connected to each other by welding.

Manfred teaches that it is conventional in the turbocharger art, to utilize said housing (22, 23, 62, 63) consisting at least two layers of metal sheet arranged one outside of the other, wherein the outer one (60, 62, 63) is thicker than the inner one (22, 23) (See attached Figure 5); the inner of the sheet metal layers being attached to the

branch pipe by a sliding connection, whereas the respective outermost sheet metal layer is formed of a first spiral housing part and a second half part; and two mutually complementary spiral portions being connected to each other by welding (See Figures 5 and 11, Column 2, lines 34-39).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the thickness of the inner and outer layers, the inner of the sheet metal layers being attached to the branch pipe by a sliding connection, whereas the respective outermost sheet metal layer is formed of a first spiral housing part and a second half part; and two mutually complementary spiral portions being connected to each other by welding, as taught by Manfred, to improve the efficiency and the longevity of the Nakazawa device.

***Claims 7 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa (Patent Number JP 54-129221 A), in view of the admitted prior art of Manfred et al. (Patent Number DE 100 22 052 A1), and further in view of Stratton et al. (Patent Number 4,182,122).***

The modified Nakazawa device discloses the invention as recited above; however, fails to disclose the distance between the two layers of metal sheet being 1mm, and in the range from 2 to 5 mm.

Stratton teaches that it is conventional in the insulated exhaust manifold art, to utilize the insulation member having the thickness of 1mm to 5mm fitted to the distance between the two layers of the metal sheet (See Figure 1, Column 4, lines 14-18).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized the distance between the two layers of metal sheet being 1mm, 8 mm, and in the range from 2 to 5 mm, as taught by Stratton, to improve the efficiency, in the modified Nakazawa device.

***Claims 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa (Patent Number JP 54-129221 A), in view of Kohl et al. (Patent Number DE 33 34 413 A1).***

Nakazawa discloses the invention as recited above; however, Nakazawa fails to disclose an insulation layer being made of textile tissue, a woven or knitted tissue.

Kohl teaches that it is conventional in the exhaust manifold art of the internal combustion engine, to utilize an insulation layer being made of textile tissue, a woven or knitted tissue (See Figure, and Abstract).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized an insulation layer being made of textile tissue, a woven or knitted tissue, as taught by Kohl, to improve the performance efficiency of the Nakazawa device.

***Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa (Patent Number JP 54-129221 A), in view of Chen et al. (Pub. Number US 2004/0142152 A1),***

Nakazawa discloses the invention as recited above; however, Nakazawa fails to disclose the manifold piece and an exhaust gas elbow pipe being made of stamped sheet metal.

Chen teaches that it is conventional in the heat shield art for offering the thermal insulation and reduced noise for vehicle, to utilize the manifold piece and an exhaust gas elbow pipe being made of stamped sheet metal (See Figures 1-3, and Paragraph [0024].

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized stamped sheet metal, as taught by Chen, to improve the protective structures, in the Nakazawa device.

***Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nakazawa (Patent Number JP 54-129221 A), in view of the admitted prior art of Manfred et al. (Patent Number DE 100 22 052 A1) and Stratton et al. (Patent Number 4,182,122), and further in view of Kohl et al. (Patent Number DE 33 34 413 A1).***

The modified Nakazawa discloses the invention as recited above; however, Nakazawa fails to disclose an insulation layer being made of textile tissue, a woven or knitted tissue.

Kohl teaches that it is conventional in the exhaust manifold art of the internal combustion engine, to utilize an insulation layer being made of textile tissue, a woven or knitted tissue (See Figure, and Abstract).

It would has been obvious to one having ordinary skill in the art at that time the invention was made, to have utilized an insulation layer being made of textile tissue, a woven or knitted tissue, as taught by Kohl, to improve the performance efficiency of the modified Nakazawa device.

### *Allowable Subject Matter*

Claims 19-20 are allowed.

Claims 4, 5, and 11-12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### *Response to Arguments*

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Specifically, regard to the applicant's argument set forth on page 21 of the applicant's Remarks filed on august 26, 2005, Applicant states that:

*"Moreover, the Examiner alleges that Manfred teaches that the outer wall of the turbine housing is thicker than the inner wall. However, Manfred in column 3, lines 21-24 (as translated by Steve) suggest a turbine outer wall that is no thicker than the inner wall."*

The examiner respectfully disagrees with the applicant, since lines 21-24 of column 3 contains no suggestion of Steve's translation. Lines 21-24 of column 3 in the reference to Manfred (DE 100 22 052 A1) should be translated as following:

*"In accordance with an arrangement of the invention the external housing is on the one hand welded at the discharge opening pipe, on the other hand at the connecting flange to the bearing house. Welded joints are easily possible in these places, because here only small temperature differences and relatively short sheet metal distances are present."*

Therefore, the reference to Manfred is still read on the limitation of "said housing consisting of at least two layers of sheet metal arranged one outside the other, wherein the outer one is thicker than the inner one", which is set forth in claim 6.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Eric Kellett (Patent number GB 1 263 932) discloses a turbo-supercharger having a pair outer casing portions and a dividing portion formed from thin sheet metal as pressing and three portions being welded together to form the casing.

- C.A.V. Limited of Warple Way (Patent Number GB 1 199 158) discloses a casing for a supercharger comprising a pair of complementary generally annular pressings form from steel sheet capable of withstanding the high temperature.

- Matsuoka (Patent Number JP 55-037508 A) discloses a turbine casing gas inlet and a turbine gas outlet made by press molding of plate metal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai-Ba Trieu whose telephone number is (571) 272-4867. The examiner can normally be reached on Monday - Thursday (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on (571) 272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TTB
October 12, 2005

Thai-Ba Trieu
Primary Examiner
Art Unit 3748